

**Bureau of Reclamation**

**Mid-Pacific Region  
Sacramento, California**

**Finding Of No Significant Impact**

**Antioch/Delta Diablo Sanitation District  
Recycled Water Project**

Recommended: *Doug Kleinsmith* Date: 7/5/07  
Environmental Specialist

Concur: *Susan M. Fay* Date: 7/6/07  
Chief, Division of Environmental  
Affairs

Approved: *Alan R. Caldwell* Date: 7/9/07  
Chief, Division of Planning

FONSI No. 07-06-MP

## **Background**

The purpose of the Recycled Water Project (Project) is to: (1) provide the infrastructure to convey excess recycled water to irrigation users in Antioch, California, (2) facilitate the use of recycled water as a replacement for potable water, and (3) reduce wastewater discharges. The Delta Diablo Sanitation District (DDSD) proposes to expand its water reuse system.

Under the Project, the City of Antioch (City) will extend the recycled water pipeline to establish recycled water service for use as landscape irrigation at the Lone Tree Golf Course, parks, playing fields, medians, and other green spaces along the pipeline alignment. DDSD began its water recycling program in 2001. Currently, the two largest users of recycled water supplied by DDSD are the two Calpine power generating plants, which use the recycled water in their cooling towers. Recycled water is also used for landscape irrigation on lands adjacent to the existing pipeline. The existing Recycled Water Facility (RWF) is sized to deliver a peak flow of 12.8 million gallons per day (mgd) of recycled water to the power plants. The average demand has been approximately 7 mgd. Peak flows of up to 12 mgd have occurred for less than 10 percent of the year. Therefore, there is significant reserve capacity in the RWF to deliver recycled water for the proposed uses.

The new recycled water pipeline will be sized between 10 and 14 inches, and will be constructed within City and county owned public easements and road right-of-ways. The land use surrounding the project area is mostly residential with some commercial areas, a few parks, schools, and an industrial area.

The facilities will include a total of approximately 19,820 feet of underground pipeline, a pump station, and a storage facility. The majority of the pipeline will be installed in an open cut trench except for key crossings where the pipeline will be installed by trenchless construction, or will connect with existing pipe, making the crossing without surface disruption. Standard installation of the pipeline will proceed at the rate of approximately 100 feet per day with an overall work-zone length of 300 to 400 feet. For work within the roadways, trench width will be approximately 8 feet, with active work areas of about 10 feet on one side of the trench and 10 to 16 feet on the other side for access by trucks and loaders. The resulting construction corridor width will be approximately 25 to 30 feet wide. Excavated trench materials will be hauled to an approved location for disposal.

## **Findings**

DDSD completed the Draft Initial Study/Mitigated Negative Declaration (IS/MND) for the Project under the California Environmental Quality Act in July 2006. The Board of Directors of DDSD adopted the Mitigated Negative Declaration in January 2007. Reclamation prepared a supplemental environmental information document in July 2007 which added information required by the National Environmental Policy Act and other Federal requirements. Based on the IS/MND and the supplemental environmental document, the Division of Planning of the Mid-Pacific Region of Reclamation has found

that the proposed action is not a major Federal action that would significantly affect the quality of the human environment. Therefore, an environmental impact statement is not required for carrying out the proposed action. Following are the reasons why the impacts of the proposed action are not significant:

1. The Project will not significantly affect biological resources. Because of its developed condition, the Project site contains only sparse fragments of native habitat. Much of the Project site and adjacent areas are devoid of natural vegetation communities and do not support high integrity wildlife habitat. Other areas within the project site largely support landscaping plants and other urbanized species of plants and animals, including many non-native flora and fauna species. A majority of the proposed pipeline alignment corresponds to existing paved roads and developed lands.

If possible, ground-disturbing activities will begin before March 15 and occur continuously throughout the construction period or at least through the nesting season (August 15) to prevent birds from establishing nests within the work area. If construction does occur from March 15 to August 15, the route will be surveyed for nests and buffer zones will be created around active nests.

Wetlands exist adjacent to the Project site north of West 10th Street at the Dow wetland preserve, at the DDS entrance, and within a seasonal drainage near the Contra Costa County Fairgrounds south of West 10th Street. The proposed project site is considered unlikely to support special status plant species, as the entire Project site occurs within existing paved roads, gravel right-of-ways and easements along the roads, or within a highly manicured golf course.

2. The Project will not affect any threatened or endangered species. No special-status animal species have been detected within the Project site. Project activities will be limited to the paved roadbed and gravel right-of-way and will not disturb or remove the adjacent wetland habitat. Since project activities will not occur in or immediately adjacent to these habitats, direct adverse impacts to individuals or their habitat is not anticipated.

To avoid affecting any California tiger salamanders (CTS) or California red-legged frogs (CRLF) which may be migrating near Lone Tree Golf Course, construction at the golf course will be limited to July through October. If any work cannot occur within this timeframe, then silt fencing will be erected around all active work areas to prevent these species from entering active work areas. Any CTS or CRLF found will be relocated by a biologist with a valid FWS recovery permit.

In addition, noise and vibration from project activities is not likely to result in adverse impacts due to the distance of these habitats from the Project site and/or the amount of additional habitat available for species to disperse away from the noise and vibration. In addition, implementation of appropriate Best Management Practices prior to, during, and following construction (including use of silt fencing or other methods to prevent erosion and siltation and stockpiling of excavated materials in upland areas) will also provide

additional protection to the adjacent wetland habitat and to any special status wildlife species that may be present in these wetland or aquatic features.

3. The Project will not affect historic properties. No historic properties are located within the proposed project area and no cultural resources were noted during the survey of the proposed route. Reclamation consulted with the State Historic Preservation Office (SHPO) with a determination that no historic properties would be affected by the proposed project. The SHPO concurred with Reclamation's finding in a letter dated May 23, 2007.

4. The Project will not significantly increase noise levels. Construction will occur for 11 months but will be less than a month in any one area. Construction will be limited to the hours of 7 a.m. to 6 p.m. (5 p.m. within 300 feet of dwellings) during the week and 8 a.m. to 5 p.m. on weekends. Best available noise control techniques will be used and impact tools will be hydraulically or electrically powered whenever possible. Exhaust mufflers will be used on any pneumatic tools.

5. The Project will not affect Indian Trust Assets (ITAs). ITAs are legal interests in property or rights held in trust by the United States for Indian Tribes or individual Indians. Indian reservations, Rancherias, and Public Domain Allotments are common ITAs in California. The nearest ITA to the proposed site is the Buena Vista Rancheria, approximately 53 miles away.

6. Implementing the Project will not disproportionately affect the human health or environment of minority populations or low-income populations.

# RECLAMATION

*Managing Water in the West*

## **Antioch/Delta Diablo Sanitation District Recycled Water Project**

### **Supplemental Environmental Information**



**U.S. Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region**

**July 2007**

## **Introduction**

The Delta Diablo Sanitation District (DDSD) prepared a draft Initial Study/Mitigated Negative Declaration (IS/MND) for the Antioch/DDSD Recycled Water Project (Project) in July 2006. This supplemental information document supplements the IS/MND by providing information required by the National Environmental Policy Act and other Federal statutes/regulations.

## **Background**

Public Law 102-575, Title XVI, Section 1604 provides general authority for the Bureau of Reclamation (Reclamation) to participate with a non-Federal sponsor in a feasibility study for water recycling projects. In order for Reclamation to participate further in the design and construction of the Project, Congress must provide construction authorization and appropriation.

## **Project Objectives and Need**

The project purpose is to serve additional potential reuse areas with recycled water from the DDSD Recycled Water Facility.

The proposed reuse areas mentioned at the bottom of Page 1-3 of the IS/MND were chosen as a result of the alternatives analysis/feasibility review documented in the Antioch/DDSD Recycled Water Project Facilities Plan, completed in March 2006. The Facilities Plan includes a Recycled Water Market Assessment, Alternatives Development and Assessment, No Action Alternative, and Preliminary Cost Estimates. The Phase I Recommended Project was chosen based on cost effectiveness, timing of demand, users served, minimal impacts, and multiple benefits.

## **Indian Trust Assets**

Indian trust assets (ITAs) are legal interests in assets that are held in trust by the U.S. Government for Federally-recognized Indian tribes or individuals. The trust relationship usually stems from a treaty, executive order, or act of Congress. The Secretary of the Interior is the trustee for the United States on behalf of Federally-recognized Indian tribes. "Assets" are anything owned that holds monetary value. "Legal interests" means there is a property interest for which there is a legal remedy, such a compensation or injunction, if there is improper interference. Assets can be real property, physical assets, or intangible property rights, such as a lease, or right to use something. ITAs can not be sold, leased or otherwise alienated without United States' approval. ITAs may include lands, minerals, and natural resources, as well as hunting, fishing, and water rights. Indian reservations, rancherias, and public domain allotments are examples of lands that are often considered trust assets. In some cases, ITAs may be located off trust land.

Reclamation shares the Indian trust responsibility with all other agencies of the Executive Branch to protect and maintain ITAs reserved by or granted to Indian tribes, or Indian individuals by treaty, statute, or Executive Order.

The Project does not impact ITAs. The nearest ITA is the Buena Vista Rancheria, approximately 53 miles northeast of the project site.

## Environmental Justice

On February 11, 1994, President Clinton issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The executive order's purpose is to avoid the disproportionate placement of any adverse environmental, economic, social, or health effects resulting from Federal actions and policies on minority and low-income populations. By memorandum on February 11, 1994, the President directed the Environmental Protection Agency (EPA) to ensure that agencies analyze the environmental effects on minorities and low-income populations and communities, including human health, social, and economic effects.

The EPA defines environmental justice as: "The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means no group of people, including racial, ethnic or economic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, state, local and tribal programs and policies." (EPA 1998).

Implementation of the Project would take place within the City of Antioch. Census data (race) for the City of Antioch population in 2000 is shown in Table 1.

**Table 1. Population Percentage by Race/Ethnicity for City of Antioch**

Race	Percent
White	65.3
Black or African American	9.7
American Indian or Alaska Native	0.9
Asian	7.4
Native Hawaiian or Pacific Islander	.04
Other race	9.2
Two or more races <sup>1</sup>	7.0
Hispanic or Latino <sup>2</sup>	22.1

1. In combination with one or more of the other races listed. The percentages may add to more than 100 percent because individuals may report more than one race.

2. Persons of Hispanic Origin may be of any race.

Source: US Census Bureau 2006

The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to determine which families are poor. If a family's total income is less than its threshold, then that family, and every individual in it, is considered poor. In 2000, 8.5 percent of the Antioch's population's income was below the poverty level (U.S. Census Bureau 2006). Antioch has an annual median income of \$60,359 (U.S. Census Bureau 2006).

The Project would supply existing irrigation customers with recycled water. The Project includes construction of a new recycled water pipeline to serve various irrigators within the City, including a golf course, city parks, and playing fields. The proposed project would have construction impacts from the construction of the pipeline and pump station. These impacts would be temporary and would be limited in duration to the area of pipeline being constructed each day. The majority of the pipeline would be installed in an open cut trench except for two crossings including the Contra Costa Canal and East Bay Municipal Utilities District's (EBMUD) Mokelumne Aqueduct, where the pipeline would be installed by trenchless construction; or would connect with existing pipe, making the crossing without surface disruption. Noise, air quality, recreation, and traffic impacts would be mitigated through standard construction measures designed to reduce impacts to less than significant levels. These measures include restrictions on construction hours and type of equipment; implementing a dust abatement program; coordination with recreational providers; and development of a traffic plan to maintain traffic flow and emergency access; ensure roadside safety; and minimize effects on parking and transit.

Operation of the Project would be conducted in accordance with all applicable federal and state requirements. There are no Federal standards governing wastewater reclamation and reuse in the United States, although the EPA has sponsored the preparation of *Guidelines for Water Reuse* (Camp Dresser & McKee 2004). Many states, including California, have developed wastewater reclamation regulations, with the objective of protecting public health and allowing for the safe use of recycled water. The California Department of Health Services established water quality criteria for reclamation operations, which are set forth in Title 22, Division 4, Chapter 3, of the *California Code of Regulations (CCR) Water Recycling Criteria*. The Title 22 standards are among the most stringent standards in the world for public health protection. Since the adoption of Title 22 in 1978, the use of recycled water for nonpotable (not fit to drink) uses has expanded throughout the state and is projected to continue to grow over the next several decades. The Project would be designed and operated in accordance with the applicable Title 22 requirements and would therefore not have a significant impact on public health or water quality.

Although there are minority and low-income populations within the project area, the project impacts would be temporary (during construction) and would be mitigated to less than significant levels. In addition, the Project would provide water for public uses (golf course and parks) that would benefit the local populations. Consequently, implementation of the Project would not disproportionately affect any minority or low-income populations.



## **Cultural Resources**

The text in the IS/MND is modified as follows:

Page 2-17, *Criteria of Significance*, paragraph 1, line 2: Change “cultural resources” to “historic properties.”

Page 2-18, paragraph 4 (Beginning with “The National register...” a): change “resources” to “properties.”

Page 2-18, paragraph 5: Rewrite this paragraph to read, “No historic properties are located within the proposed project area and no cultural resources were noted during the WSA survey. Reclamation consulted with the State Historic Preservation Office (SHPO) with a determination that no historic properties would be affected by the proposed project. The SHPO concurred with Reclamation’s finding in a letter dated May 23, 2007.”

## **Consultation and Coordination**

In addition to those agencies which received copies of the public review document for comment, preparation of the IS/MND involved formal consultation/coordination with the Contra Costa Water District (the potable and raw water purveyor for the project area), The California Department of Fish & Game, and the U. S. Fish and Wildlife Service.

Comment letters were received from the California Department of Transportation and an Antioch Resident, Mr. Darrin West. Comment letters and replies are attached. (Attachment 1)

The IS/MND was available for review at the District, as well as City Hall. Electronic versions of the document remain posted for public viewing on both the DDSD and City of Antioch websites.

## **Environmental Commitments**

Attachment 2 is the revised mitigation and monitoring reporting program.

# Attachment 1

## Antioch and DDS Recycled Water Project IS/MND Comments and Responses

Two written comment letters received from:

- Governor's Office of Planning and Research, State Clearinghouse and Planning Unit
- California Department of Transportation (Caltrans)

Other comments received from:

- California Department of Fish and Game (email comment)
- California Department of Health Services (verbal comment)

Responses to comments follow this summary.

### **Governor's Office of Planning and Research, State Clearinghouse and Planning Unit**

**OPR-1** The review period closed on August 21, 2006 and the comments from the responding agencies are enclosed. Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental documentation.

**OPR-2** This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

**Response to OPR-1** All comment letters provided by the State Clearinghouse have been reviewed and responses provided. These comments will be considered by DDS prior to adopting the Mitigated Negative Declaration and approving the project. DDS will notify in writing all commenting agencies of the Board meeting where the Mitigated Negative Declaration will be considered for approval. The Final IS/MND document (including the comment letters and responses) shall be sent to commenting agencies.

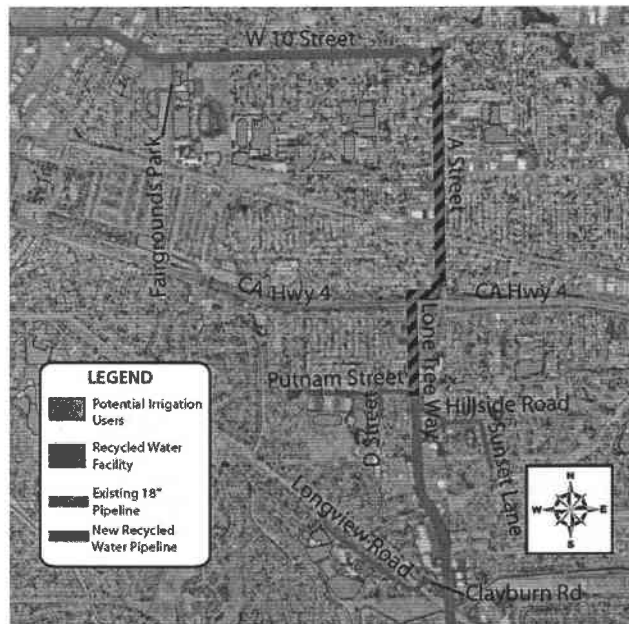
**Response to OPR-2** Comment noted that we have complied with the State Clearinghouse review requirements for draft documents.

# Attachment 1

## California Department of Transportation

**CDT-1** Any work or traffic control within the State's right-of-way (ROW) will require an encroachment permit from the Department. To apply for an encroachment permit, submit a completed encroachment permit application, environmental documentation, and five (5) sets of plans (in metric units) which clearly indicate the State ROW.

**Response to CDT-1** The proposed project will tie-in to an existing pipeline outside of the State ROW (the section of the existing pipeline that is within the State ROW will not be disturbed), therefore no work will be conducted within the State ROW and a Caltrans encroachment permit will not be required. The existing pipeline and State Highway 4 are shown on a map below.



## California Department of Fish and Game

**CDFG-1** Thank you for the information on the Mitigated Negative Declaration, July 2006, for the Antioch/DDSD Recycled Water Project. One of the alternatives creates open water storage areas on the Lone Tree Golf Course in Antioch. If you choose to pursue this alternative these areas may become an attractive nuisance for native amphibians including California tiger salamander and California red legged frog. In addition these areas could provide breeding habitat for bull frogs. DFG recommends you send a project description and request for review to the U.S. Fish and Wildlife Service [ryan\\_olah@fws.gov](mailto:ryan_olah@fws.gov) and [sheila\\_larsen@fws.gov](mailto:sheila_larsen@fws.gov). Please cc me [CDFG] on your correspondence to the Service. If you have any questions please contact me [Janice Gan]. Janice Gan CDFG Region3, 209-835-6910

**Response to CDFG-1** As requested by CDFG, Ryan Olah and Sheila Larsen of USFWS were contacted in September 2006 and were given a copy of the project description. Additional email correspondence occurred, which was followed by a meeting on October 13, 2006 between RMC project managers (Christy Kennedy and Karen Frye), Delta Diablo Sanitation District

## Attachment 1

representatives (Meg Herston and Greg Baatrup), a biological subconsultant (Shannon Lucas of Christopher A. Joseph & Assoc.), and USFWS staff (Ryan Olah and Sheila Larsen). The meeting resulted in different options that were potentially acceptable to USFWS that would avoid adverse effects to the federally threatened California tiger salamander (CTS) and California red-legged frog (CRLF) from the above ground water storage pond alternative. These options included conducting focused trapline surveys and a possible Incidental Take Permit, relocating the pond, and maintenance and operational requirements. However, the Antioch/DDSD team ultimately decided to proceed with the originally proposed underground water storage tank, thereby negating the initial comment by CDFG. However, given the level of concern by USFWS during previous correspondence regarding possible CTS or CRLF movement in the area, an additional mitigation measure has been added to the MND to prevent adverse effects to these species during excavation and construction activities associated with the installation of the underground storage tank.

This mitigation measure is as follows:

**Measure BR-2: Avoidance of CTS and CRLF** – Conduct all excavation and construction activities associated with installation of the pipeline and underground water storage tank in the vicinity of the Lone Tree Golf Course during July through October, when CTS and CRLF are less active and unlikely to be migrating through the work areas. If all work cannot occur during this timeframe, then silt fencing must be erected around all active work areas (excavated areas, soil stockpiles, equipment and vehicle staging areas) prior to any ground disturbance or staging activities to prevent CTS and CRLF from entering active work areas. The work areas shall be checked by a qualified biologist at the beginning of each work day to ensure proper function of the fence and to locate any CTS or CRLF that have entered the work area; if any are found, they shall be relocated outside the work area and into suitable nearby habitat prior to commencement of construction activities by a biologist possessing a valid USFWS recovery permit to handle these species. A summary of monitoring and relocation activities shall be submitted to USFWS within 30 days of the finalization of construction activities and/or the end of the required fencing and monitoring period (through June).

### California Department of Health Services

**DHS-1** Include text in Chapter 1 under the permitting section that a project number would be opened with DHS for the new proposed usage of recycled water in Antioch.

**Response to DHS-1** The following text was added to the permitting section in Chapter 1:

- Department of Health Services (DHS): Open project number for new usage proposed (the likely new project number would be 702 under Water System #0790004)



Arnold Schwarzenegger  
Governor

Attachment 1  
STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Sean Walsh  
Director

August 22, 2006

Meg Herston, Gred Bishop  
Delta Diablo Sanitation District  
2500 Pittsburg Antioch Highway  
Antioch, CA 94509-1373

Subject: Recycled Water Project  
SCH#: 2006072093

Dear Meg Herston, Gred Bishop:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 21, 2006, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

*Terry Roberts*

Terry Roberts  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency

Post-it™ Fax Note 7671		Date 12-1-06	# of pages 4
To Christy	From Sheila Brown		
Co./Dept. DBSD	Co. OPR		
Phone # 415 321-3400	Phone # 916 323-3018		
Fax # 415 321 3401	Fax # 916 445-0613		

**Document Details Report**  
**State Clearinghouse Data Base**  
**Attachment 1**

**SCH#** 2006072093  
**Project Title** Recycled Water Project  
**Lead Agency** Delta Diablo Sanitation District

**Type** MN Mitigated Negative Declaration  
**Description** D

The DDSD Recycled Water facility proposes to expand its water reuse system. Under the Recycled Water Project (Project), DDSD would extend the recycled water pipeline, using existing pipeline and constructing new pipeline, to establish recycled water service to the Lone Tree Golf Course and for use as landscape irrigation at City parks and other green spaces along the alignment. The facilities include a total of 19,820 feet of underground pipe, a pumpstation and a storage facility.

**Lead Agency Contact**

**Name** Meg Herston, Gred Bishop  
**Agency** Delta Diablo Sanitation District  
**Phone** 925/ 756-1900 **Fax**  
**email**  
**Address** 2500 Pittsburg Antioch Highway  
**City** Antioch **State** CA **Zip** 94509-1373

**Project Location**

**County** Contra Costa  
**City** Antioch  
**Region**  
**Cross Streets** Vicinity of Pittsburg-Antioch Whighway, W. 10th Street, Lone Tree Way and Golf Course Road  
**Parcel No.** Multiple  
**Township** 2N **Range** 1E, 2E **Section** 30, 31 **Base** None

**Proximity to:**

**Highways** 4  
**Airports**  
**Railways** 1  
**Waterways** Contra Costa Canal, New York Slough (Delta)  
**Schools** Several (Antioch USD)  
**Land Use**

**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Geologic/Seismic; Landuse; Minerals; Noise; Public Services; Schools/Universities; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife

**Reviewing Agencies** Caltrans, District 4; California Highway Patrol; Department of Conservation; Department of Water Resources; Department of Fish and Game, Region 3; Department of Health Services; Office of Historic Preservation; Native American Heritage Commission; Department of Parks and Recreation; Regional Water Quality Control Board, Region 2; Resources Agency; State Water Resources Control Board, Clean Water Program; Delta Protection Commission

**Date Received** 07/21/2006 **Start of Review** 07/21/2006 **End of Review** 08/21/2006

## Attachment 1

STATE OF CALIFORNIA — BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER Governor

### DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE  
P. O. BOX 23660  
OAKLAND, CA 94623-0660  
PHONE (510) 286-5505  
FAX (510) 286-5513  
TTY (800) 735-2929



Flex your power!  
Be energy efficient!

August 7, 2006



CC-4-R27.79  
CC004933 3  
SCH200607209X

Ms. Meg Herston  
Delta Diablo Sanitation District  
2500 Pittsburg-Antioch Highway  
Antioch, CA 94509

*Clear  
8-21-06  
C*

Dear Ms. Herston:

#### Recycled Water Project – Draft Initial Study/Mitigated Negative Declaration

Thank you for including the California Department of Transportation (Department) in the environmental review for the Recycled Water Project. We have reviewed the Draft Initial Study/Mitigated Negative Declaration and offer the following comments:

#### Encroachment Permit

Any work or traffic control within the State's right-of-way (ROW) will require an encroachment permit from the Department. To apply for an encroachment permit, submit a completed encroachment permit application, environmental documentation and five (5) sets of plans (in metric units) that clearly indicate State ROW to the following address:

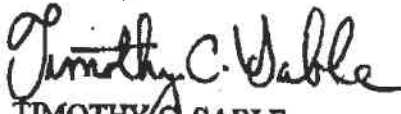
Michael Condie, District Office Chief  
Office of Permits  
California Department of Transportation, District 4  
P. O. Box 23660  
Oakland, CA 94623-0660

## Attachment 1

Ms. Meg Herston  
August 8, 2006  
Page 2

Should you have any questions about this letter or require further information, please call Christian Bushong at (510) 286-5606.

Sincerely,

  
TIMOTHY C. SABLE  
District Branch Chief  
IGR/CEQA

c: State Clearinghouse



## Attachment 1

**Herston, Meg**

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**From:** Wehrmeister, Tina [cwehrmeister@ci.antioch.ca.us]  
**Sent:** Monday, April 02, 2007 5:04 PM  
**To:** Herston, Meg; CKennedy@rmcwater.com  
**Cc:** Bernal, Ron  
**Subject:** FW: City Website Comment Form

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Below is a comment on the recycled water project that was submitted on the City website.

Tina Wehrmeister  
 Deputy Director of Community Development  
 City of Antioch  
[www.ci.antioch.ca.us](http://www.ci.antioch.ca.us)

**FILE COPY**

-----Original Message-----

**From:** DarrinWest@yahoo.com [mailto:DarrinWest@yahoo.com]  
**Sent:** Saturday, March 31, 2007 4:14 PM  
**To:** Wehrmeister, Tina  
**Subject:** City Website Comment Form

### Planning Division

Name: Darrin West  
 Address: 2012 Mangrove Way  
 City: Antioch  
 State: CA  
 Zip: 94509  
 Tel: 925-978-2985  
 Fax:  
 Email: [DarrinWest@yahoo.com](mailto:DarrinWest@yahoo.com)

Comments: I read the report on the new recycled water project that will feed the Antioch golf course. The report considers the effect of a pipeline rupture on odor. But it does not seem to consider the effect of a pipeline rupture on the water quality in the Antioch reservoir beside the golf course. It also does not consider whether a rupture would cause a permanent or long-lasting health hazard, ground water quality or other foreseeable negative effects near the point of rupture, particularly within a residential area. The report considers the effect on the reservoir and other areas when the pipeline is operating normally, but other than odor, it does not seem to consider the effects of a pipeline rupture. I understand that the water quality is fairly safe from a biological or health-affecting perspective. But it would be comforting to have an expert analyze these consequences if they have not already done so.



Attachment 1  
**Delta Diablo Sanitation District**

OFFICE AND TREATMENT PLANT: 2500 PITTSBURG-ANTIOCH HIGHWAY, ANTIOCH, CA 94509-1373  
TEL.: (925) 756-1900 ADMIN. FAX: (925) 756-1961 MAINT. FAX: (925) 756-1963 OPER. FAX: (925) 756-1962 TECH. SVCS. FAX: (925) 756-1960  
www.ddsd.org

May 2, 2007

FILE COPY

Mr. Darrin West  
2012 Mangrove Way  
Antioch, CA 94509

SUBJECT: COMMENT ON ANTIOCH RECYCLED WATER INITIAL STUDY/MITIGATED  
NEGATIVE DECLARATION

Dear Mr. West:

This letter is in response to your comment submitted to the City of Antioch on March 31, 2007. In your comment, you ask about what consideration has been given to permanent or long lasting health hazard, ground water, or other foreseeable negative effects of a pipeline rupture, particularly with a residential area and near the Antioch Reservoir. You also ask that an expert analyze these consequences if they have not already done so.


Although Antioch is a seismically active area, the pipeline is not located adjacent to, nor does it cross any active faults with surface rupture (the project area is not located in a designated Alquist-Priolo Earthquake Fault Zone), and the pipeline and water storage facility would be designed to relevant seismic and other standards to avoid potential for pipeline rupture from seismic activity or other geologic hazards. However, to minimize adverse water quality impacts in the unlikely event of an upset, a shut-off valve would be installed.

The Delta Diablo Sanitation District considers concerns about single-event pipeline ruptures to be speculative in nature. Thus, in accordance with CEQA guidelines section 15145, no further study has been conducted and discussion of such impacts is not included in the prepared environmental documentation.

The concerns that you raised in your March 31, 2007 comment, as well as this response correspondence, will be included as a part of the administrative record which accompanies the Antioch Recycled Water Project environmental impact documents (State Clearinghouse #2006072093).

The City of Antioch and the Delta Diablo Sanitation District strongly support and consistently meet or exceed the State and Federal Government's regulatory requirements for public health and safety. I hope that this response has adequately addressed your comment. If you have any further concerns, please contact me at (925) 756-1949.

Sincerely,

  
Meg Herston  
Assistant Engineer

MH:bjm

cc: Ron Bernal, City of Antioch  
District File  
Chron File

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## CHAPTER 3

**3. MITIGATION MONITORING AND REPORTING PROGRAM**

The following is a summary of mitigation measures integrated into the Project that are adequate to reduce all potentially significant impacts to a less-than-significant level. These are the same exact mitigations presented in Chapter 2. **Table 3-1** presents a summary of seasonal restrictions on construction activities and **Table 3-2** presents a summary of all mitigation measures.

**Table 3-1: Seasonal Restrictions on Construction**

Activity	Mit Meas	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Construction at Golf Course</b>													
Trenching and Construction at Golf Course <sup>2</sup>	-	Construction											
Pre-construction survey for nesting birds <sup>1</sup> (at golf course)	BR-1	-	-	Nesting Season (survey required)						-	-	-	-
Trenching and Construction at Golf Course <sup>2</sup>	BR-2	Breeding Season (silt fencing and daily surveys required)						-	-	-	-	Breeding Season (silt fencing and daily surveys required)	
<b>Construction within City Streets</b>													
Trenching and Construction within City Streets		Construction											
Pre-construction survey for nesting birds <sup>1</sup> (city streets)	BR-1			Nesting Season (survey required)									

1. A qualified wildlife biologist will conduct pre-construction surveys of all potential nesting habitat within 100 feet of construction activities.

2. The work areas shall be checked by a qualified biologist at the beginning of each work day to ensure proper function of the fence and to locate any CTS or CRLF that have entered the work area; if any are found, they shall be relocated outside the work area and into suitable nearby habitat prior to commencement of construction activities by a biologist possessing a valid USFWS recovery permit to handle these species.




 = Construction Time  
 = CTS and CRLF Breeding Season – silt fencing and daily surveys required during construction during this period  
 = Nesting Season (pre-construction surveys required for work in the area)

Table 3-2: Mitigation Measures Summary

Mitigation Measure(s)	Responsible Party and Action	Timing
<b>2.3. Air Quality</b>		
<p><b>Measure AQ-1: The construction contractor shall implement a dust abatement program, which shall include the following elements.</b></p> <ul style="list-style-type: none"> <li>Water all active construction areas at least twice daily, depending on type of operation, and wind exposure;</li> <li>Designate a person or persons to oversee the implementation of a comprehensive dust control program and to increase watering, as necessary;</li> <li>Construction grading activity should be discontinued in high wind conditions that cause excessive neighborhood dust problems, based on the discretion of the construction inspector;</li> <li>Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer) in accordance with Section 23114 of the California Vehicle Code during transit to and from the site;</li> <li>Apply non-toxic soil stabilizers (e.g., latex acrylic copolymer) if visible soil material is carried onto adjacent public streets; and</li> <li>Incorporate Storm Water Best Management Practices throughout the course of the Project.</li> </ul>	<p>Design Engineering will include requirements in specifications.</p> <p>Construction Manager will provide review.</p>	During Construction
<b>2.4. Biological Resources</b>		
<p><b>Measure BR-1: Avoidance of bird nesting disturbance.</b></p> <p>If possible, ground-disturbance activities (such as trenching) should begin before March 15 and should occur continuously throughout the construction period or at least through the nesting season (August 15) to prevent bird species from establishing nests within the work area. If construction occurs between March 15 and August 15, the DDSD should implement the following elements prior to bird nesting season and the start of ground-disturbing construction:</p> <p>A qualified wildlife biologist will conduct pre-construction surveys of all potential nesting habitat within 100 feet of construction activities. If active nests are found during pre-construction surveys, a 100-foot buffer zone would be created around nests of sensitive birds protected by the MBTA or special status birds. If pre-construction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation will be required.</p>	<p>Design Engineering will include requirements in specifications.</p> <p>A qualified biologist and construction manager will provide review.</p>	<p>Pre-construction surveys shall occur prior to construction activities in that area.</p> <p>Notification and compliance shall be ongoing.</p>
<p><b>Measure BR-2: Avoidance of CTS and CRLF.</b></p> <p>Conduct all excavation and construction activities associated with installation of the pipeline and underground water storage tank in the vicinity of the Lone Tree Golf Course during July through October, when CTS and CRLF are less active and unlikely to be migrating through the work areas. If all work cannot occur during this timeframe, then silt fencing must be erected around all active work areas (excavated areas, soil stockpiles, equipment and vehicle</p>	<p>Design Engineering will include requirements in specifications.</p> <p>A qualified biologist and construction manager will provide review.</p>	<p>Daily biologist surveys in work area at the beginning of the work day if construction is outside of the</p>

January 2007  
**RMC**

Mitigation Measure(s)	Responsible Party and Action	Timing
<p>Public Resources Code.</p> <p>The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the Native American Heritage Commission within 24 hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for "...protection of inadvertent destruction." To achieve this goal, it is recommended that the construction personnel on the project be instructed as to the potential for discovery of cultural or human remains, and both the need for proper and timely reporting of such finds, and the consequences of failure thereof.</p>		
<b>2.6. Geology and Soils</b>		
<p><b>Measure GS-1: Conduct Geotechnical Review of the location chosen for the storage reservoir.</b> The City shall conduct geotechnical review of the final proposed storage tank location before construction activities on the reservoir begin to determine geotechnical feasibility of the chosen site.</p>	<p>Design Engineering will include requirements in specifications.</p> <p>Construction Manager will provide review.</p>	Design Phase, prior to construction.
<b>2.7. Hazards &amp; Hazardous Materials</b>		
<p><b>Measure HM-1: Prepare a Health and Safety Plan, and Hazardous Materials Management/Spill Prevention Plan.</b> The City shall require the contractor to prepare a Health and Safety Plan that includes a Project-specific contingency plan for hazardous materials and waste operations before construction activities could begin. The Health and Safety Plan shall be applicable to all construction activities, and shall establish policies and procedures to protect workers and public from potential hazards. The plan shall be prepared according to federal and California OSHA regulations for hazardous materials Health and Safety Plans.</p> <p>Elements of the plan shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• A discussion of hazardous materials management, including delineation of hazardous material storage areas, access and egress routes, waterways, emergency assembly areas, temporary hazardous waste storage areas</li> <li>• Notification and documentation procedures</li> <li>• Spill control and countermeasures, including employee spill prevention/response training</li> <li>• Inclusion of a discussion of potential contaminants encountered from neighboring sites (see DTSC Cortese List)</li> </ul>	<p>Design Engineering will include requirements in specifications.</p> <p>Construction Manager will provide review.</p>	Design Phase, prior to construction.
<b>2.8. Hydrology &amp; Water Quality</b>		
<p><b>Measure WQ-1: Best Management Practices shall be implemented to minimize potential water quality impacts during and after construction, and a SWPPP shall be developed.</b></p> <p>The City shall require contractors to implement BMPs for construction/post-construction activities as specified by the California Storm Water Best Management Practices Handbook (California Storm Water Quality Association, 2003) and/or the Manual of Standards for Erosion and Sediment Control Measures (ABAG, 1995). The BMPs include measures guiding the management and operation of construction sites to control and minimize the potential contribution of pollutants to storm runoff from these areas. These measures address procedures for controlling erosion and</p>	<p>Design Engineering will include requirements in specifications.</p> <p>Construction Manager will provide review.</p>	Design phase and construction.

Mitigation Measure(s)	Responsible Party and Action	Timing
<p>sedimentation and managing all aspects of the construction process to ensure control of potential water pollution sources. Erosion and sedimentation control practices typically include:</p> <ul style="list-style-type: none"> <li>• Limiting construction to the dry-weather months</li> <li>• Installation of silt fencing and/or straw wattle</li> <li>• Soil stabilization</li> <li>• Revegetate graded and fill areas with a standard erosion control mix (approved by a native habitat Restorationist)</li> <li>• Runoff control to limit increases in sediment in storm water runoff (e.g., straw bales, silt fences, check dams, geofabrics, drainage swales, and sand bag dikes)</li> <li>• Equipment maintenance shall be performed at least 100 feet from all water bodies and wetlands, with measures in place to contain spills of diesel fuel, gasoline, or other petroleum products. Drainage from all work sites shall be directed away from any water bodies or wetlands where feasible.</li> <li>• Prevent erosion of uplands and sedimentation of creeks, tributaries and ponds</li> <li>• Minimize creek bank instability</li> <li>• Prevent flooding</li> <li>• Return grades to preconstructed contours</li> </ul> <p>SWPPP shall be developed incorporating standard BMPs such as those listed above for conserving water quality of receiving waters during construction. In addition, the Project shall comply with RWQCB regulations and standards to maintain and improve the quality of both surface water and groundwater reserves.</p> <p><b>Measure WQ-2: The proposed project shall be designed and operated to minimize potential adverse impact on water quality.</b>  As proposed, the Project shall provide high quality recycled water to users. All landscape irrigation systems shall be operated in accordance with the requirements of Title 22 of the California Code of Regulations and any reclamation permits issued by the California Regional Water Quality Control Board, San Francisco Bay Region. Reclamation permits typically require that irrigation rates match the evapotranspiration rates of the plants being irrigated, and that no irrigation occur within 50 feet of any domestic supply wells. There are no domestic supply wells located within 50 feet of the recommended irrigation sites served by the recycled water pipeline. Currently, runoff from the golf course is directed to three sumps located on the course. These sumps are connected to the reservoir by a conduit in each location that is open on the golf course end, and gated at the reservoir end. The gates are left open in winter and closed during the summer months beginning around April. With implementation of recycled water usage at the golf course, the conduits to the reservoir should be permanently closed and blocked off or removed so runoff from the course does not enter the reservoir.</p> <p>As previously discussed in the Air Quality Section, given the extent to which the recycled water is treated, odors are not expected to be a problem at or near water use sites, at or near the storage tank (which would be enclosed), or in the event of a pipeline rupture. Mitigation measures for potential odors shall either include the addition of a circulation system, or chemical (i.e. copper sulfate) addition in the tank.</p>	<p>Design Engineering will include requirements in specifications.</p> <p>Construction Manager will provide review.</p>	<p>Design phase and construction.</p>

Mitigation Measure(s)	Responsible Party and Action	Timing
<b>2.11. Noise</b>		
<p><b>Measure N-1: Construction noise measures.</b> To reduce daytime noise impacts due to construction, the City shall require that construction contractors muffle or control noise from construction equipment through implementation of the following measures:</p> <ul style="list-style-type: none"> <li>Daytime construction activities in the City shall be limited to between 7:00 a.m. and 6:00 p.m. Monday through Friday, or between 8:00 a.m. and 5:00 p.m. Monday through Friday within 300 feet of occupied dwellings, as per Section 5-17.05 of the Antioch Code of Ordinances. Daytime construction activities in the City shall be limited to between 9:00 a.m. and 5:00 p.m. on weekends and holidays, as per Section 5-17.05 of the Antioch Code of Ordinances.</li> <li>Equipment and trucks used for construction should utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields and shrouds, and installation of blankets around the Project site, wherever feasible and necessary). Construction vehicles should be properly maintained and equipped with exhaust mufflers that meet state standards.</li> <li>Impact tools (e.g., jackhammers and pavement breakers) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10dBA. External jackets on the tools themselves should be used where feasible, and this could achieve a reduction of 5dBA. Quieter procedures shall be used such as drilling rather than impact equipment whenever feasible; and</li> <li>Stationary noise sources shall be located as far from sensitive receptors as possible. If they must be located near sensitive receptors, they shall be muffled to the extent feasible and enclosed within temporary sheds.</li> </ul>	<p>Design Engineering will include requirements in specifications.</p> <p>Construction Manager will provide review.</p>	<p>During construction</p>
<b>2.14. Recreation</b>		
<p><b>Measure R-1: Coordination with recreation facilities is required to minimize disruption.</b> The City shall be required to coordinate with the City's Traffic Division, the Recreation Department, and Lone Tree Golf Course in order to minimize disturbance from construction. Appropriate signage, pedestrian/user management, and detours shall be provided by the contractor, and a haul route shall be delineated. The City shall also coordinate with Lone Tree Golf Course on the appropriate siting of facilities, such as the storage tank and pump station.</p>	<p>Design Engineering will include requirements in specifications.</p> <p>Construction Manager will provide review.</p>	<p>Prior to, and during construction.</p>



Mitigation Measure(s)	Responsible Party and Action	Timing
<b>2.15. Transportation/Traffic</b>		
<p><b>Measure T-1: Obtain and comply with local road encroachment permits and prepare a Traffic Control Plan.</b></p> <p>The City would obtain all necessary local road encroachment permits, prior to construction and would comply with all the applicable conditions of approval. As deemed necessary by the governing jurisdiction, the road encroachment permits will require the contractor to prepare a Traffic Control Plan in accordance with professional engineering standards prior to construction. The Traffic Control Plan could include the following requirements:</p> <ul style="list-style-type: none"> <li>• Identify all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow.</li> <li>• Develop circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.</li> <li>• Schedule truck trips outside of peak morning and evening commute hours.</li> <li>• Limit lane closures during peak hours to the extent possible.</li> <li>• Use haul routes minimizing truck traffic on local roadways to the extent possible.</li> <li>• Include detours for bicycles and pedestrians in all areas potentially affected by Project construction.</li> <li>• Install traffic control devices as specified in the California Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones.</li> <li>• Develop and implement access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals, schools, parks, and other recreational areas. The access plans would be developed with the facility owner or administrator. To minimize disruption of emergency vehicle access, ask affected jurisdictions to identify detours, which will then be posted by the contractor. Notify in advance the facility owner or operator of the timing, location, and duration of construction activities and the locations of detours and lane closures. As stated in R-1, the City shall be required to coordinate with the City's Traffic Division, the Recreation Department, and Lone Tree Golf Course about pipeline routing in order to minimize disturbance from construction. Appropriate signage, pedestrian/user management, and detours shall be provided by the contractor.</li> <li>• Store construction materials only in designated areas.</li> <li>• Coordinate signage for temporarily eliminated on-street parking, with instructions including timing and duration, and nearby areas where parking is currently available.</li> <li>• Coordinate with local transit agencies for temporary relocation of routes or bus stops in works zones, as necessary.</li> </ul>	<p>Design Engineering will include requirements in specifications.</p> <p>Construction Manager will provide review and work with the City's traffic division.</p>	<p>Prior to, and during construction.</p>